

Work Order ID 163386
Tuesday, June 27, 2017 11:35:49 AM

163386

SCRAP

Item ID: D5162-041

Accept

Revision ID:

N9NN04N1N0

Setup Start *NS1*

Item Name: Seat Structure Assembly

Stop *NS2*

Start Date: 6/20/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 6/27/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date: JUL 03 2017

Date:

Run Start *NR1*

QC: DAE

Date: SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3016	(DEO) A1								
D3017	C								
D5162	A								
D5189	A								

105 Pick Kit 0.00

1N5

Packaging

Memo 0.30

Packaging

110 Weld per dwg A/R 4130 rod Batch: 4127025 0.00

11N

Large Fab

Memo 1.00

Large Fab

FABRICATE D5189-041 AS PER DWG AND BY USING DT8622.

DO NOT OPEN HOLES TO SIZE, IT WILL BE OPEN UPON FINAL ASSEMBLY.

ONLY WELD STUD D4667-041 TO TUBE. END CAP WILL BE WELDED AFTER OPENING HOLES IN TUBE.

①

DK

17/07/06

Work Order ID 163386

Tuesday, June 27, 2017 11:35:50 AM

163386

Item ID: D5162-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Seat Structure Assembly

Stop

NS2

Start Date: 6/20/2017

Start Qty: 1.00

1

Cust Item ID:

Required Date: 6/27/2017

Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

NR1

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

Weld per dwg A/R 4130 rod Batch: N127925

0.00

120

Large Fab

Memo

1.00

Large Fab

FABRICATE (2) D3016-041 AS PER DWG.

WELD ASSEMBLY USING DT8597 WELD JIG.

***DO NOT DRILL HOLES AS THEY WILL BE TRANSFER DRILL AT
FUTHER STEP.***

***DO NOT WELD GUSSETS AND BRACKET THEY WILL BE WELDED
AT A FUTHER STEP.***

(2)

DK

17/67/06

Work Order ID 163386

163386

Tuesday, June 27, 2017 11:35:50 AM

Item ID: D5162-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Seat Structure Assembly

Stop

NS2

Start Date: 6/20/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 6/27/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

NR1

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130 Weld per dwg A/R 4130 rod Batch: 127925

0.00

130

Large Fab

Memo

1.00

Large Fab

FABRICATE D3017-041 AS PER DWG:

USE DT8598 FOR BENDING D3017-1-3 TUBE.

USE DT8621 FOR DRILLING (#30 DRILL) BACK FRAME. ***DO NOT
OPEN HOLES IT WILL BE DONE AT FUTHER STEP***

USE DT8622 FOR DRILLING (#30 DRILL) D3017-5. ***DO NOT OPEN
HOLES IT WILL BE DONE AT FUTHER STEP***

USE DT8598 JIG FOR WELDING TUBES, LUGS AND ONE END CAP.
OTHER END CAP WILL BE WELDED AFTER OPENING HOLES.

140

QC5- Inspect part completeness to step on W/O

0.00

140

QC

Memo

0.02

Quality Control

①

OK

17/07/11

Work Order ID 163386

163386

Tuesday, June 27, 2017 11:35:50 AM

Item ID: D5162-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Seat Structure Assembly

Stop

NS2

Start Date: 6/20/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 6/27/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

NR1

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

150

Large Fab

Memo

1.00

Large Fab

1- BOLT SEAT FRAME TO ASSEMBLY PLATE DT8624.

2- TRANSFER DRILL D5189-041 TO D3016-041 AS PER DWG USING #30 DRILL AND CLECO THEN DRILL TO FINISH SIZE.

3- TRANSFER DRILL SEAT PAN TO D5189-041 AND 3016-041.

4- TRASFER DRILL SEAT AND D3016-041 TO D3017-041 USING DT AND USING TOOL TO ACHIEVE DESIRED ANGLE ON BACK REST.

155

155

Large Fab

Memo

1.00

Large Fab

1- ASSEMBLE AND TRANSFER DRILL D5189-043 TO D3017-041. OPEN HOLES TO FINISH SIZE AS PER DWG

STRUT:

1-

SEAT BRACE:

1- USE DT10132 AND DT10133 TO TRANSFER DRILL HOLES IN SEAT PAN AND SEAT BRACE.

Weld per dwg A/R 4130 rod Batch: 127425 0.00

1767/11

1767/11

Work Order ID 163386

Tuesday, June 27, 2017 11:35:50 AM

163386

Item ID: D5162-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Seat Structure Assembly

Stop

NS2

Start Date: 6/20/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 6/27/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

Stop

NR1

QC:

Date:

SPC (Y/N):

Date:

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan
Code

Accept
Qty

Reject
Qty

Reject
Number Insp.
Stamp

160 QC5- Inspect part completeness to step on W/O

0.00

160

Memo

0.02

QC

Quality Control

165 Weld per dwg A/R 4130 rod Batch: _____ 0.00

165

Large Fab

Memo

1.00

Large Fab

SEAT FRAME:
1- WELD D3016-13 BRACKET, D3016-15 GUSSET AND D3016-17 GUSSET
AND PER DWG

2- LAST STEP IS TO FINISH WELDING ALL WELDS AS PER DWG (SEAT
AND BACK FRAME)

170 QC9- Inspect visual per QSI004- Fusion Welds 0.00

170

QC

Memo

0.02

Quality Control

DQA: _____ Date: _____

mid 18 Jun 2019

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

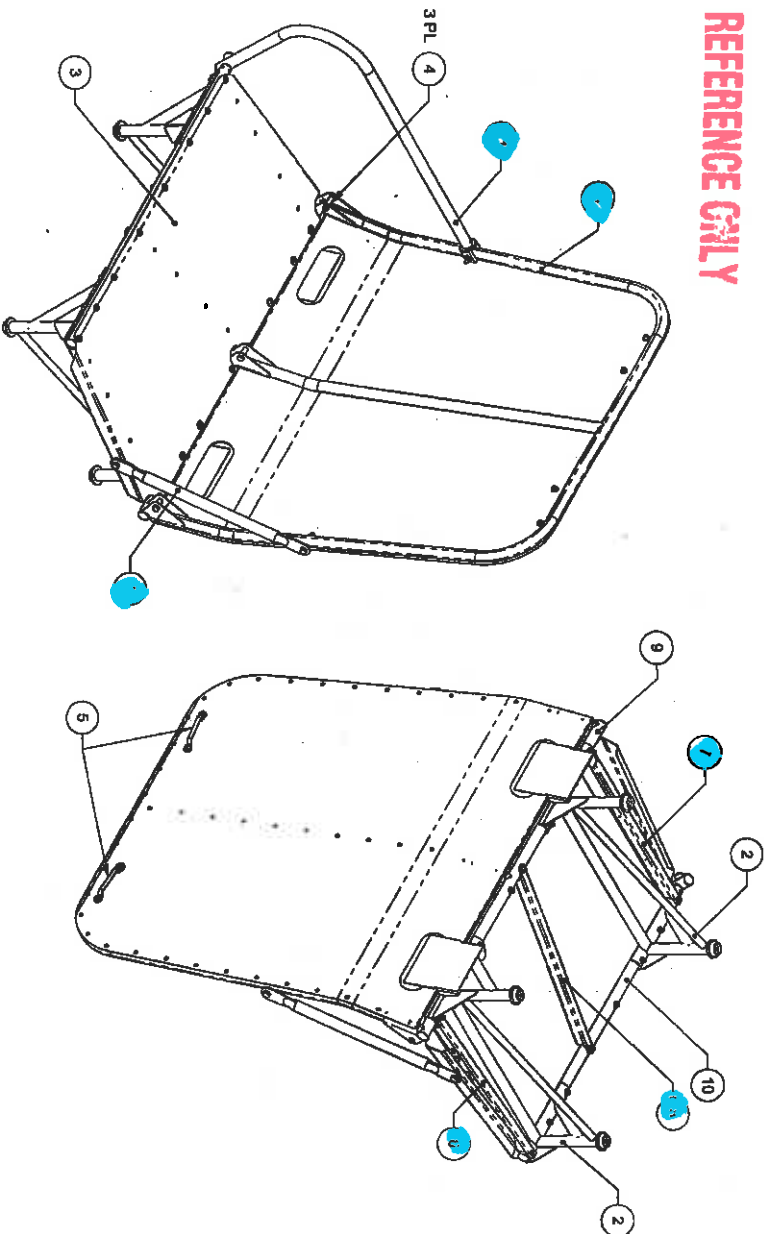
Date: _____

Work Order update only

PART
AEROSPACE

Work Order: 163386		DISPOSITION		AGAINST DEPARTMENT/PROCESS				Completed By	
Part No. 15167-041	Re-work ☐	Scrap ☒	Use-as-is ☐	Suspected Unapproved ☐	Skid-tube Machining ☐	Cross tube Small Fab ☐	Finishing Composite ☐	Water Jet Prod. Eng. Coord. Rec/Store/Packaging Supplier ☐	Engineering Quality Other ☐
NCR No. 19-7169					Thermoforming Large Fab ☒				
Date: 17.01.19	Step #: 160	QTY Effective: ①				MRB (QS1042) Approval DAS 9-88 12.01.19			
Description Work Order Deviation		Disposition							
found at inspection on seg. 160 that find holes on seat frame assembly where drill opened up to wrong size (.251" instead of .191")		Disassemble and keep B21A9-31 (strut), B51B2-051 (seat back ass.), B51B9-043 (armrest ass.) and J.D. under B163386, will be use on replacement work order 164423.							
Q.C. operator		Scrap B3016-041 (seat frame), B3022-1 (seat pan), B5159-041 (seat brace), B5159-043 (seat brace), B5159-041 (seat rib), B51B9-041 (tube ass.)							
Q.C. recommendation is revised work under information and really clear. Fabricate the sub parts on different work order		QC / QA Coordinator Approval 17.07.19							
Root Cause		FAULT CATEGORY							
Environment	No Re-verification	Pressure/Forced Bending	Temperature/Cure	Power Loss/Surge	Positioned Wrong				
Design	Operator	Centre Not Concentric	Set-up	Folio/Program	Outside Dimensions				
Doc/Data	Offset/Setup	Cracks	BOM/Route	Broken/Damage/Defect	Over/Under tolerance				
Equip/Tooling	Supplier	Crimp/Kink/Ripple/Wave	Inspection Incomplete/Unqualified	Wrong Stock Pulled	Part Incorrect				
Handling/Pre	Training	Cuffs	Contamination	Out of Sequence	Part Lost/Missing				
Material	Use for Testing	Crushing	Countersink	Off-set	Drawing				
Internal Transport	Poor Information	Heat Treat	Cut Too Short	Mislabeled	Finish				
Tribal Knowledge	Rushing	Wave/Twist in Tube	Instructions Incomplete/Unclear	Fit/Function	Misread				
LOA	Product Improvement	Marks/Chatter	Drill Holes	Misaligned/off center	Turning Sequence				
Substation	Process Improvement	OTHER :							
Past Expiry Date	Manufacturing Process								
Misidentified	Past Due								

ITEM	QTY	P/N	DESCRIPTION
1	1	D5162-041	SEAT STRUCTURE ASSEMBLY
2	2	D3016-041	SEAT FRAME ASSEMBLY
3	1	D3022-1	SEAT PAN
4	3	D3024-1	SPACER
5	2	D3031-1	LOOP
6	1	D5156-011	SEAT BACK BRACE ASSEMBLY
7	1	D5156-012	SEAT BACK BRACE ASSEMBLY
8	1	D5156-013	SEAT BACK BRACE ASSEMBLY
9	1	D5156-014	SEAT BACK BRACE ASSEMBLY
10	1	D5156-015	SEAT BACK BRACE ASSEMBLY
11	1	D5156-016	SEAT BACK BRACE ASSEMBLY
12	1	D5156-017	SEAT BACK BRACE ASSEMBLY
13	1	D5156-018	SEAT BACK BRACE ASSEMBLY
14	1	D5156-019	SEAT BACK BRACE ASSEMBLY
15	1	D5156-020	SEAT BACK BRACE ASSEMBLY
16	1	D5156-021	SEAT BACK BRACE ASSEMBLY
17	1	D5156-022	SEAT BACK BRACE ASSEMBLY
18	1	D5156-023	SEAT BACK BRACE ASSEMBLY
19	1	D5156-024	SEAT BACK BRACE ASSEMBLY
20	1	D5156-025	SEAT BACK BRACE ASSEMBLY
21	1	D5156-026	SEAT BACK BRACE ASSEMBLY
22	1	D5156-027	SEAT BACK BRACE ASSEMBLY
23	1	D5156-028	SEAT BACK BRACE ASSEMBLY
24	1	D5156-029	SEAT BACK BRACE ASSEMBLY
25	1	D5156-030	SEAT BACK BRACE ASSEMBLY
26	1	D5156-031	SEAT BACK BRACE ASSEMBLY
27	1	D5156-032	SEAT BACK BRACE ASSEMBLY
28	1	D5156-033	SEAT BACK BRACE ASSEMBLY
29	1	D5156-034	SEAT BACK BRACE ASSEMBLY
30	1	D5156-035	SEAT BACK BRACE ASSEMBLY



D5162-041 SEAT STRUCTURE ASSEMBLY

GENERAL NOTES:
 1) MATERIAL: N/A
 2) FINISH: NONE
 3) TOLERANCES: PER DART OSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: N/A
 6) IDENTIFICATION: N/A
 7) WEIGHT: 19.1 lbs

APPROVED

REV.	A	NEW ISSUE	A/S	14.10.03
DESIGN	A/S	DESCRIPTION	BY	DATE
DRAWN	A/S	DART AEROSPACE LTD		
CHECKED	AP	HANSEN, RY, ONTARIO, CANADA		
MFG. APPR.	DD	D5162		
APPROVED	HS	SEAT STRUCTURE ASSY		
DE APPR.	DS			
DATE	14.10.03			

RELEASED
 2015 FEB 04
 Rev U-322

Work Order ID 163386

163386

Tuesday, June 27, 2017 11:35:50 AM

Item ID: D5162-041

Accept

Revision ID:

N900040100

Setup Start

NS1

Item Name: Seat Structure Assembly

Stop *NS2*

Start Date: 6/20/2017

1

Cust Item ID:

Required Date: 6/27/2017

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

NR1

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

175 QC5- Inspect part completeness to step on W/O

0.00

175

QC

Memo

0.02

Quality Control

180

Chemical Conversion Coat per QSI005 4.1

0.00

180

HandFinish

Memo

0.91

Hand Finishing

CHEMICAL CONVERSION SEAT PANEL D3022-1 AND BACK PANEL
D3023-1 AS PER DWG

190

QC7-Inspect Chemical Conversion Coat

0.00

190

QC

Memo

0.02

Quality Control

163386

Page 7

Accept

N900040100

NST

NS

*
→
*

Cust Item ID:

→

Customer:

Date:

NR1

Date:

NR

**Insp.
Starr**

200

200*

Small Fab

Memo

2.00

Small Fab

(TO FABRICATE D5162-051)
ASSEMBLE D3023-1 PANEL TO D3017-041 BACK FRAME AS PER DWG
D5162-051

210

QC5- Inspect part completeness to step on W/O

0.00

*
C
D
C
*

Memo

0.02

Quality Control

220

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

00.0

* **

Powdercoat

Memo

0.32

Powder Coating

POWDER COAT ALL INDIVIDUAL PARTS

START TIME: _____
OVEN TEMPERATURE: _____
FINISH TIME: _____

Work Order ID 163386

Tuesday, June 27, 2017 11:35:50 AM

163386

Item ID: D5162-041

Accept

Revision ID:

N900040100

Setup Start

NS1

Item Name: Seat Structure Assembly

Stop

NS2

Start Date: 6/20/2017

1

Cust Item ID:

Required Date: 6/27/2017

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

Stop

NR1

QC:

Date:

SPC (Y/N):

Date:

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

230 QC3- Inspect Part Finish

0.00

230

Memo

0.02

QC

0.02

Quality Control

240

0.00

240

Small Fab

Memo

1.46

Small Fab

ASSEMBLE AS PER DWG

250

QC5- Inspect part completeness to step on W/O

0.00

250

QC

Memo

0.02

Quality Control

Work Order ID 163386

163386

Tuesday, June 27, 2017 11:35:50 AM

Item ID: D5162-041

Accept

N9000040100

Setup Start

NS1

Revision ID:

Item Name: Seat Structure Assembly

Stop

NS2

Start Date: 6/20/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 6/27/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

Stop

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

260

Identify as per dwg & Stock Location: _____

0.00

260

Packaging

Memo

0.01

Packaging

270

QC21- Final Inspection - Work Order Release

0.00

270

QC

Memo

0.10

Quality Control

Picklist Print

Tuesday, June 27, 2017 11:35:45 AM

Work Order ID: 163386

163386

Parent Item: D5162-041

D5162-041

Parent Item Name: Seat Structure Assembly

Start Date: 6/20/2017

Required Date: 6/27/2017

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP REV:A 14.11.05 NEW ISSUE DD VERF:JLM IPP
REV:B 15-02-06 AS PER DWG REV.A DD VERF:JLMPP REV:C
16.08.31 ADD D3016 PARTS DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3016-1		Manufactured	No			105	Each	4.0000	2	2			
D3016-1									**				
Tube										OK			
D3016-1		Manufactured	No			105	Each	2.0000	2	2			
D3016-1									**				
Saddle										OK			
D3016-3		Manufactured	No			105	Each	4.0000	4	4			
D3016-3									**				
Tube										OK			
D3016-5		Manufactured	No			105	Each	4.0000	2	2			
D3016-5									**				
Tube										OK			

Picklist Print

Tuesday, June 27, 2017 11:35:45 AM

Work Order ID: 163386

Parent Item: D5162-041

Parent Item Name: Seat Structure Assembly

163386
D5162-041

Start Date: 6/20/2017

Required Date: 6/27/2017

Start Qty: 1.00

Required Qty: 1.00

D3016-7

Manufactured No

105 Each

4.0000

4 4

D3016-7

Tube

**

DYC

Location
WA002

Loc Qty

Loc Code

D3016-9

Manufactured No

105 Each

2.0000

2 2

D3016-9

Saddle

**

DYC

Location
WA001

Loc Qty

Loc Code

D5190-1

Manufactured No

110 Each

6.0000

1

D5190-1

Armrest Fitting

**

DYC

Location
ST136

Loc Qty

Loc Code

D5190-3

Manufactured No

110 Each

18.0000

1

D5190-3

Weld Pin

**

DYC

Location
WA002

Loc Qty

Loc Code

154143

18 18

1

Picklist Print

Tuesday, June 27, 2017 11:35:45 AM

Work Order ID: 163386

Parent Item: D5162-041

Parent Item Name: Seat Structure Assembly

163386
D5162-041

Start Date: 6/20/2017 Required Date: 6/27/2017
Start Qty: 1.00 Required Qty: 1.00

M4130NT0.750W.049

Purchased No

105 f

86.153 13.8 14.52632

**

M4130NT0 750W 049
4130 RD Tube .750 x.049W

DYC

Location

Loc Qty

Loc Code

MAT033

86.153

m136760

15.168

m137091

0.634

m137286

12.1

m137415

3.363

m137477

7.054

m137834

47.834

110 Each

11.0000

1

1

**

DYC

D4667-041

Manufactured No

D4667-041

Armrest Stud Assembly

Location

Loc Qty

Loc Code

W/A001

1

154903

1

W/A003

10

161307

10

120 Each

26.0000

4

4

**

No

Manufactured

D3020-1

D3020-1

Fitting

Location

Loc Qty

Loc Code

W/A001

20

162103

20

W/A002

6

160409

6

Picklist Print

Tuesday, June 27, 2017 11:35:45 AM

Work Order ID: 163386

Parent Item: D5162-041

Parent Item Name: Seat Structure Assembly

163386
D5162-041

Start Date: 6/20/2017

Required Date: 6/27/2017

Start Qty: 1.00

Required Qty: 1.00

D3017-7

Manufactured

No

130

Each

11.0000

3 3

D3017-7

Lug

Location

Loc Qty

Loc Code

WA002

155291
161761

11

3

8

130

Each

1.0000

1 3

D3023-1

Manufactured

No

D3023-1

Back Panel

Location

Loc Qty

Loc Code

WA001

161666

1

1

105

f

27.3770

2.5

2.631579

M4130NT0.750W.083

Purchased

No

M4130NT0 750W 083

4130 RD Tube .750 x.083W

Location

Loc Qty

Loc Code

MAT032

m136569
m137415

27.377

7.044

20.333

150

Each

2.0000

1

1

D3022-1

Manufactured

No

D3022-1

Seat Pan

Location

Loc Qty

Loc Code

WA001

161788
161789

2

1

1

Picklist Print

Tuesday, June 27, 2017 11:35:46 AM

Work Order ID: 163386

Parent Item: D5162-041

Parent Item Name: Seat Structure Assembly

163386
D5162-041

Start Date: 6/20/2017
Required Date: 6/27/2017
Start Qty: 1.00
Required Qty: 1.00

D3016-15
Manufactured No

165 Each 4.0000 2 2

**

D3016-15
Gusset

Location
WA002

Loc Qty
4

Loc Code

158746

165 Each

10.0000

2 2

**

D3016-13
Bracket

Manufactured No

Location
WA002

Loc Qty
10

Loc Code

161432
162104

165 Each

6.0000

2 2

**

D3016-17
Gusset

Manufactured No

Location
WA002

Loc Qty
6

Loc Code

138268
158751

165 Each

17.0000

4 4

**

D3017-11
Cap

Manufactured No

Location
WA001

Loc Qty
17

Loc Code

156769
161681

165 Each

17.0000

4 4

**

155249

3

Picklist Print

Tuesday, June 27, 2017 11:35:46 AM

Work Order ID: 163386

Parent Item: D5162-041

Parent Item Name: Seat Structure Assembly

163386
D5162-041

Start Date: 6/20/2017
Start Qty: 1.00
Required Date: 6/27/2017
Required Qty: 1.00

MS20600-AD4W2

Purchased

No

200 Each

246.0000 46 46

**

MS20600-AD4W2
Rivet

Location
GA

Loc Qty

Loc Code

129

m126475

6

m136047

1

m136579

1

m137075

121

ST308

117

m134762

17

m137459

100

240 Each

557.0000

1 1

AN4-6A

Purchased

No

**

AN4-6A
BOLT

Location

Loc Qty

Loc Code

ST345

557

M137464

557

240 Each

44.0000

2 2

**

NAS43DD4-16FC
NAS43DD4-16FC
Spacer

Location

Loc Qty

Loc Code

ST550

44

m135774

44

Picklist Print

Tuesday, June 27, 2017 11:35:46 AM

Work Order ID: 163386

Parent Item: D5162-041

Parent Item Name: Seat Structure Assembly

163386
D5162-041

Start Date: 6/20/2017 Required Date: 6/27/2017
Start Qty: 1.00 Required Qty: 1.00

AN4-4A Purchased No

240 Each 29.0000 1 1

AN4-4A

BOLT

Location

Loc Qty

Loc Code

over003

m137061

20

ST346

m137391

20

ST346

m137391

9

ST346

m137391

9

D5159-043 Manufactured No

105 Each 3.0000 1 1

D5159-043

Seat Back Brace Assembly

Location

Loc Qty

Loc Code

ST358

162102

3

ST358

162102

3

ST358

162102

3

240 Each 56.0000 4 4

MS27039-4-20 Purchased No

MS27039-4-20

Screw

Location

Loc Qty

Loc Code

ST279

m135056

56

ST279

m135056

6

ST279

m137321

50

Picklist Print

Tuesday, June 27, 2017 11:35:46 AM

Work Order ID: 163386

Parent Item: D5162-041

Parent Item Name: Seat Structure Assembly

163386
D5162-041

Start Date: 6/20/2017 Required Date: 6/27/2017
Start Qty: 1.00 Required Qty: 1.00

MS20600-AD4W4

Purchased

No

240 Each

1,769.000 4 4

**

MS20600-AD4W4
Rivet

Location

Loc Qty

Loc Code

CCK004

511

M135704

11

M137820

500

ST308

497

M137587

497

WA003

761

M135442

204

M136986

108

M137412

449

240 Each

283.0000

4 4

**

MS27039-1-19

Purchased

No

MS27039-1-19

Screw

Location

Loc Qty

Loc Code

GA

80

m134134

80

ST280

203

m137361

203

240 Each

36.0000

3 3

**

D3024-1

Manufactured

No

D3024-1

Spacer

Location

Loc Qty

Loc Code

ST015

36

160410

36

Tuesday, June 27, 2017 11:35:46 AM

Shop Packet Print

Picklist Print

Tuesday, June 27, 2017 11:35:46 AM

Work Order ID: 163386

Parent Item: D5162-041

Parent Item Name: Seat Structure Assembly

163386
D5162-041

Start Date: 6/20/2017 Required Date: 6/27/2017
Start Qty: 1.00 Required Qty: 1.00

MS27039-1-17

Purchased

No

240 Each

136.0000 1 1

**

MS27039-1-17

Screw (601.1954)

Location

Loc Qty

Loc Code

ST280

136

m127831

136

240 Each

205.0000 4 4

MS24693-S49

Purchased

No

240 Each

**

MS24693-S49

Screw

Location

Loc Qty

Loc Code

ST286

205

m130835

205

240 Each

920.0000 30 30

**

NAS1149D0332J

Purchased

No

NAS1149D0332.J

Washer

Location

Loc Qty

Loc Code

FP

211

m136015

203

m137075

272

GA

272

m136643

437

ST264

0

m136015

437

m137736

Picklist Print

Tuesday, June 27, 2017 11:35:47 AM

Work Order ID: 163386

Parent Item: D5162-041

Parent Item Name: Seat Structure Assembly

163386
D5162-041

Start Date: 6/20/2017
Start Qty: 1.00
Required Date: 6/27/2017
Required Qty: 1.00

MS20600-AD4W5

Purchased

No

240 Each

173.0000 8 8

**

MS20600-AD4W5

Blind Rivet

Location

Loc Qty

Loc Code

ST308

m132769

36

36

WA004

m131618

137

134

m132640

3

240 Each

1,475.000 17 17

**

MS2104213

Purchased

No

MS2104213

Nut

Location

Loc Qty

Loc Code

FP001

m135945

79

79

GA

m134360

394

102

M13665

292

OVER007

m134360

500

0

m137886

500

ST303

m137680

502

502

240 Each

1,043.000 17 17

**

NAS1149D0432J

Purchased

No

NAS1149D0432J

WASHER

Location

Loc Qty

Loc Code

GA

m131026

24

24

ST264

m134676

1019

30

m137459

989

Tuesday, June 27, 2017 11:35:47 AM

Shop Packet Print

Picklist Print

Tuesday, June 27, 2017 11:35:47 AM

Work Order ID: 163386

Parent Item: D5162-041

Parent Item Name: Seat Structure Assembly

163386
D5162-041

Start Date: 6/20/2017

Required Date: 6/27/2017

Start Qty: 1.00

Required Qty: 1.00

D5159-041

Manufactured

No

105 Each

2.0000

1

1

D5159-041

Seat Back Brace Assembly

Location

Loc Qty

Loc Code

ST358

2

2

AN4-14A

Purchased

No

240 Each

304.0000

2

2

AN4-14A

Bolt

Location

Loc Qty

Loc Code

FG

5

5

122141

5

over003

200

0

M136354

100

100

M137495

100

100

M137886

99

99

ST344

99

99

M137544

240

Each

D3031-1

Manufactured

No

240 Each

6.0000

2

2

D3031-1

Loop

Location

Loc Qty

Loc Code

GA

6

6

159132

240

Each

174.0000

3

3

AN3-12A

Purchased

No

240 Each

174.0000

3

3

AN3-12A

Bolt

Location

Loc Qty

Loc Code

ST349

174

174

153854

174

174

Tuesday, June 27, 2017 11:35:47 AM

Shop Packet Print

Picklist Print

Tuesday, June 27, 2017 11:35:47 AM

Work Order ID: 163386

Parent Item: D5162-041

Parent Item Name: Seat Structure Assembly

163386
D5162-041

Start Date: 6/20/2017 Required Date: 6/27/2017
Start Qty: 1.00 Required Qty: 1.00

MS21042L4

Purchased

No

240

Each

2,061,000

8

8

**

MS210421 4
Nut

Location

Loc Qty

Loc Code

FP001

m133363

10

GA

m135058

51

OVER007

m137402

400

ST303

m137680

1000

m137544

600

105

Each

6,0000

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

Back to
Stock
JUL 20 2017

D2199-31

Manufactured

No

105

Each

6,0000

1

1

D2199-31

Strut Details

Location

Loc Qty

Loc Code

ST352

158213

6

Each

6

240

Each

57,0000

2

2

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

Purchased

No

240

Each

57,0000

2

2

**

MS27039-1-20

Screw

</

Picklist Print

Tuesday, June 27, 2017 11:35:47 AM

Work Order ID: 163386

Parent Item: D5162-041

Parent Item Name: Seat Structure Assembly

163386
D5162-041

Start Date: 6/20/2017
Required Date: 6/27/2017
Start Qty: 1.00
Required Qty: 1.00

MS27039-1-18

Purchased

No

240 Each

1,547.000 3 3

**

MS27039-1-18

Screw

Location

Loc Qty

Loc Code

GA

221

123522

39

124326

182

over006

1200

124326

1200

ST280

126

124326

126

Manufactured

No

105

Each

2.0000

1

1

**

DYC

D5159-045

Seat Rib Assembly

Location

Loc Qty

Loc Code

ST358

2

160558

2

240

Each

218.0000

1

1

**

AN970-4

Purchased

No

AN970-4

Washer

Location

Loc Qty

Loc Code

ST260a

150

m135390

0

m137886

150

ST321

68

m137321

18

m137544

50

Back to Stock As Sub Assy.

- ✓ D5159-041 x1 B: ~~163386~~ 154050
- ✓ D5159-043 x1 B: ~~163386~~ 160483
- ✓ D5162-051 x1 B: 163386
- ✓ D5162-043 x1 B: 163386

JUL 20 2017



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3016	REV. A SHEET 1 OF 3
DATE 01.05.18		TITLE SEAT FRAME ASSEMBLY	SCALE NTS
A	01.05.18	NEW ISSUE	

QTY	PART NUMBER	DESCRIPTION	MATERIAL
X	D3016-041	SEAT FRAME ASSEMBLY	N/A
1	D3016-1	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
2	D3016-3	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
1	D3016-5	TUBE	AISI 4130N TUBE, Ø0.50 DIA x 0.049 WALL (M4130N-T0500W049)
2	D3016-7	TUBE	AISI 4130N TUBE, Ø0.50 DIA x 0.049 WALL (M4130N-T0500W049)
1	D3016-9	SADDLE	AISI 4130N TUBE, Ø1.00 DIA x 0.120 WALL (M4130N-T1000W120)
1	D3016-11	SADDLE	AISI 4130N TUBE, Ø1.00 DIA x 0.120 WALL (M4130N-T1000W120)
1	D3016-13	BRACKET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
1	D3016-15	GUSSET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
1	D3016-17	GUSSET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
2	D3020-1	FITTING	N/A

NOTES

- 1) WELD PER DART QSI 004
- 2) ON SHEET METAL PARTS, BREAK ALL UNMARKED CORNERS 0.020-0.040
- 3) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 163386 M5
10703

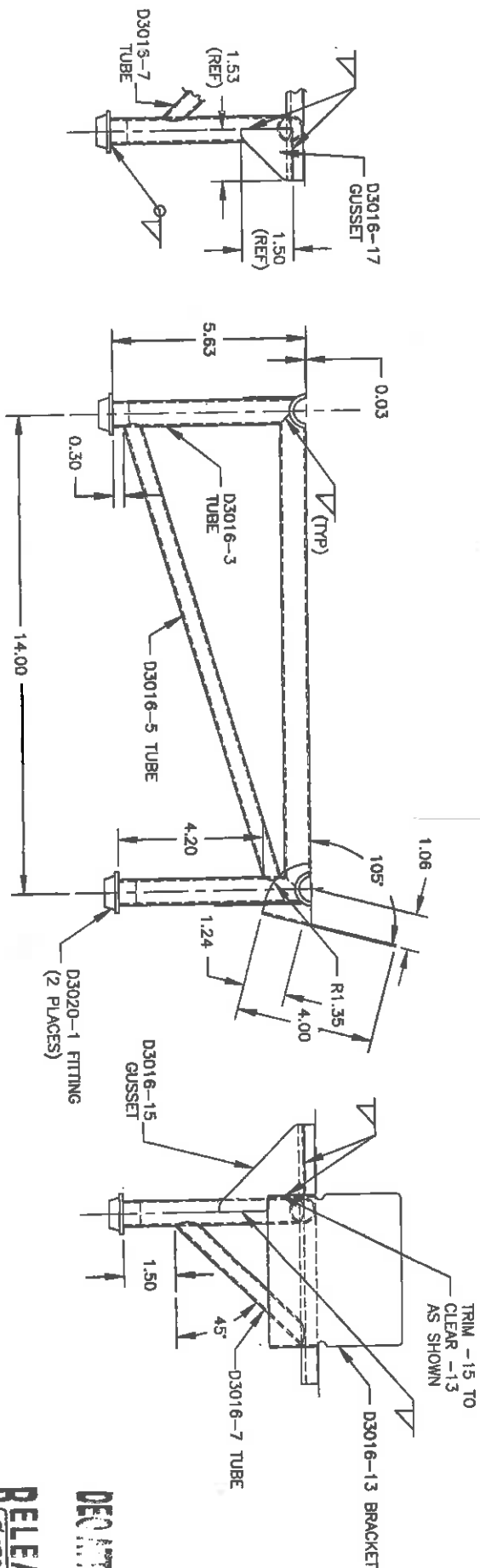
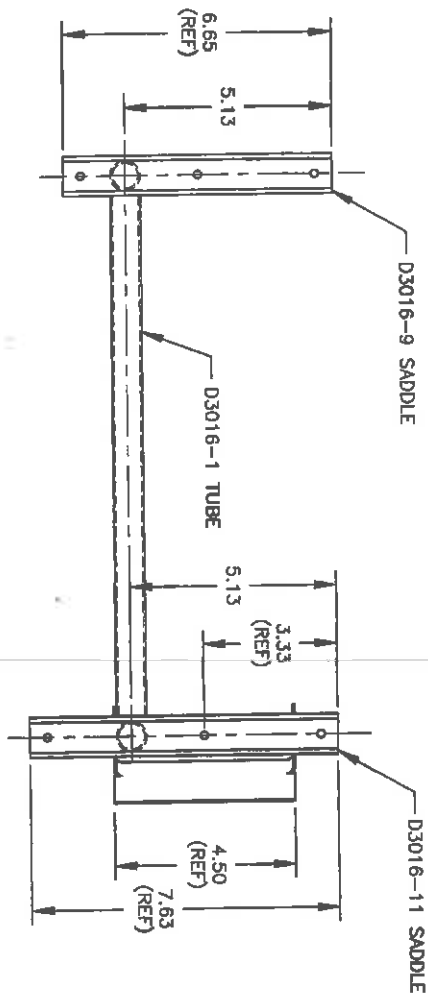
DEO ATTACHED

RELEASED
01.05.30

Copyright © 2001 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

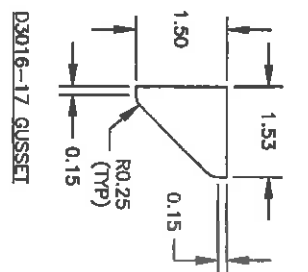
D3016-041 SEAT FRAME ASSEMBLY



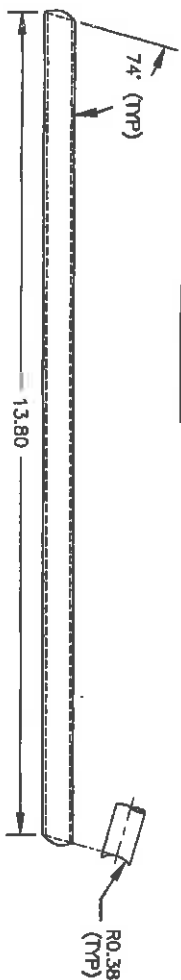
DECLASSIFIED
 RELEASED
 01-05-20

DESIGN		DRAWN BY		DART		DART AEROSPACE LTD.	
CHECKED	APPROVED			DRAWING NO.	D3016	REV. A	
DATE	01.05.18			TITLE	SEAT FRAME ASSEMBLY	SHEET 2 OF 3	SCALE
				1:3			

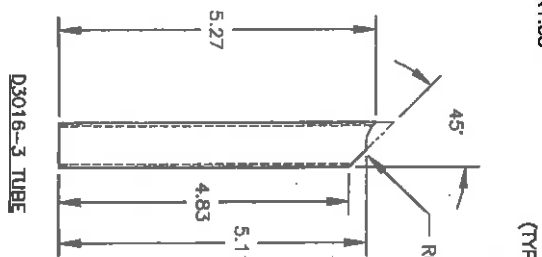
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



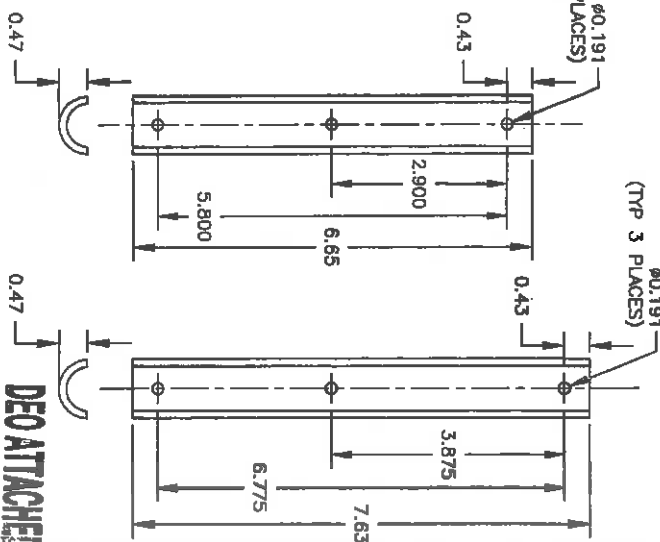
FLAT PATTERN



D3016-5 TUBE

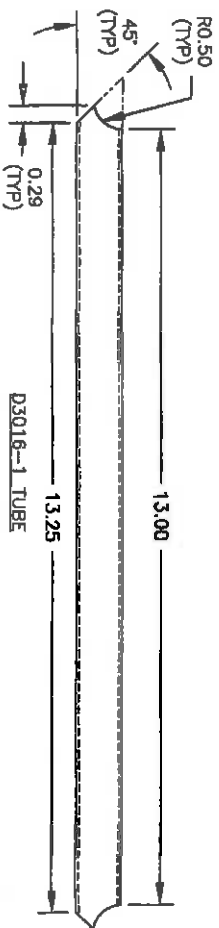


D3016-3 TUBE



D3016-9 SADDLE

DEO ATTACHE
PELLEASSED
D306
9.05.30



D3016-1 TUBE

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DANT AEROSPACE LTD.

DESIGN	DRAWN BY	DART		DART AEROSPACE LTD.	
		Hemel Hempstead, Herts, UK			
CHECKED	APPROVED	DRAWING NO.	REV.	SHEET 3 OF 3	SCALE
CP	CP	D3016			
DATE		TITLE			
01.05.18		SEAT FRAME ASSEMBLY			

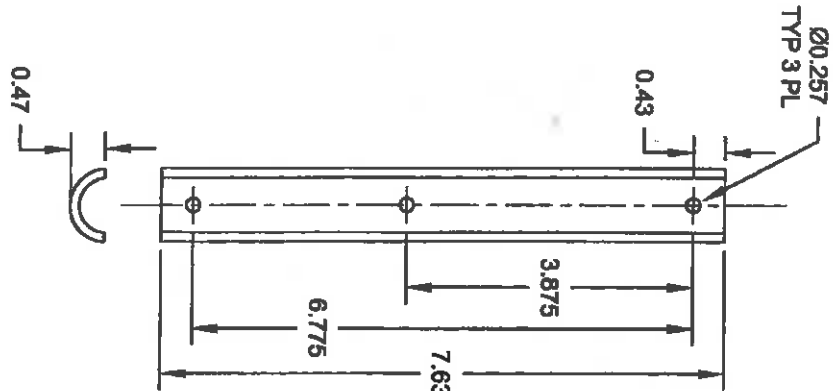
DRAWING NO.	TITLE		REV. A	DART AEROSPACE LTD		D.E.O. NO.	SHEET NO.	SCALE
D3016	SEAT FRAME ASSEMBLY			ENGINEERING ORDER		D3016-A-1	SHEET 1 OF 1	NTS
DRAWN	1	CHECKED	10.01.29	MFG. APPR.	10.01.29	APPROVED	10.01.29	DE APPR.
DATE	10.01.29	DATE	10.01.29	DATE	10.01.29	DATE	10.01.29	DATE

PURPOSE:
TO REVISE D3016-11 SADDLES HOLE SIZES

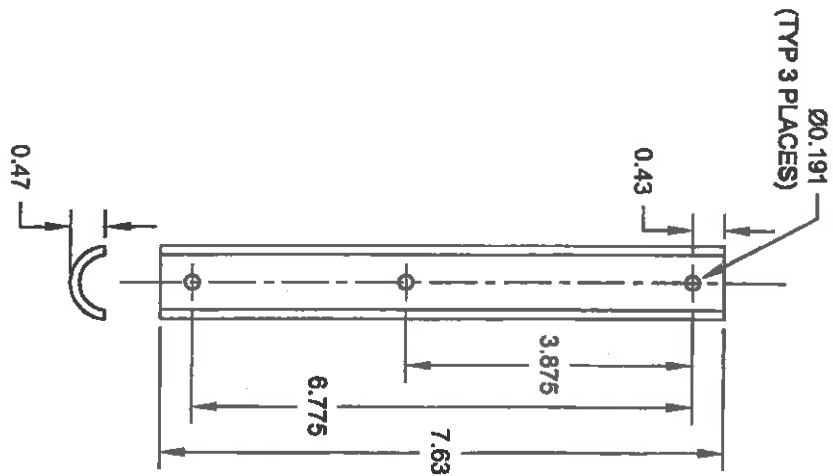
CHANGE:

DETAIL D3016-11 SADDLE (SHEET 3): Ø0.257 TYP 3 PL WAS Ø0.191 (TYP 3 PLACES) AS SHOWN:

IS:



WAS:

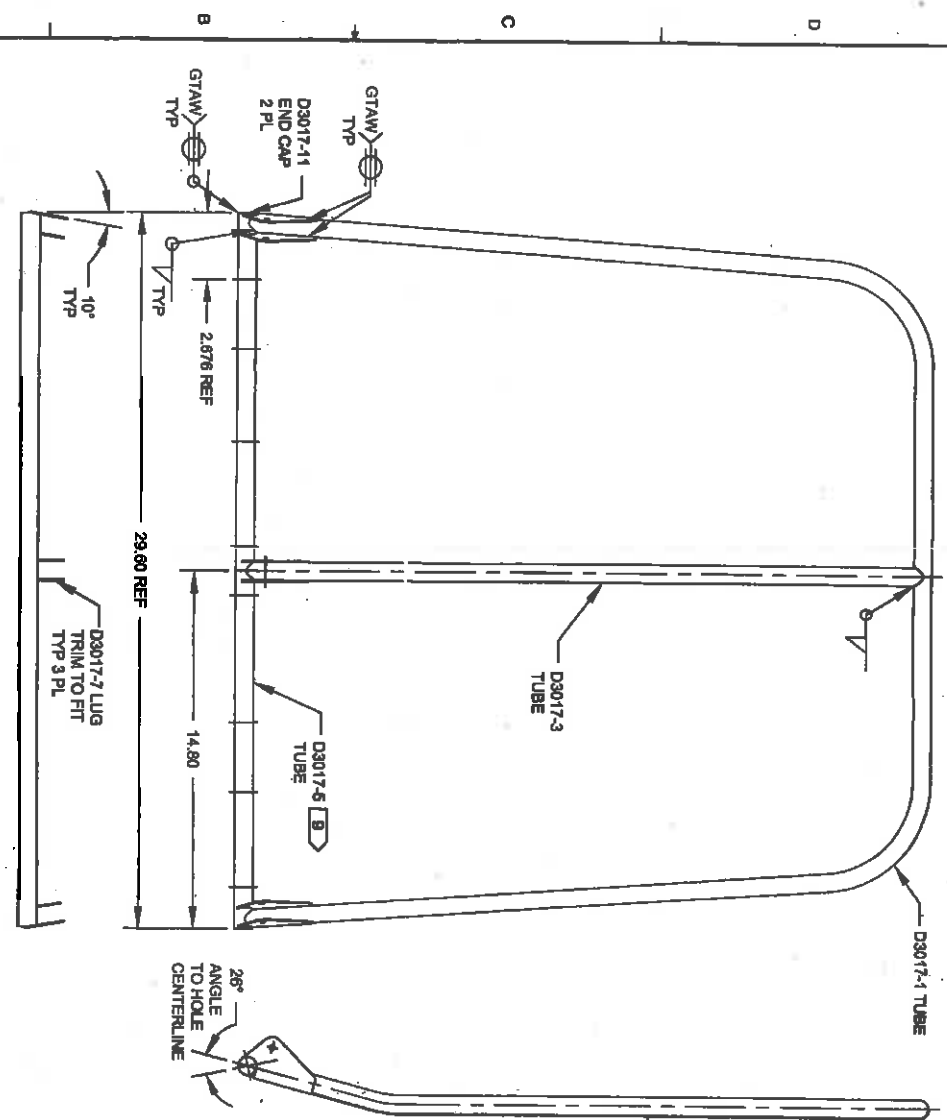


D3016-11 SADDLE

D3016-11 SADDLE

COPYRIGHT © 2010 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

ITEM No.	QTY	PART NUMBER	DESCRIPTION
1	1	D3017-041	BACK FRAME ASSEMBLY
2	1	D3017-1	TUBE
3	1	D3017-3	TUBE
4	3	D3017-5	LUG
5	2	D3017-11	END CAP



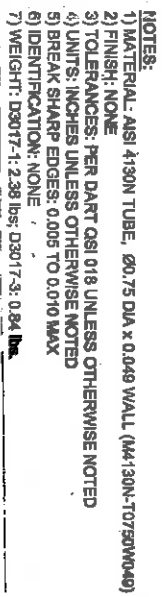
- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART OSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART: PN "D3017-041" USING FINE POINT PERMANENT INK/MARKER
 - 7) WEIGHT: 4.50 lbs
 - 8) WELD PER DART OSI 004
 - 9) XOTATE SO THAT PILOT HOLES ARE ANGLED AS SHOWN IN END VIEW.

D3017-041 BACK FRAME ASSEMBLY

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	CP	01.05.18
B	REFORMAT DWG. -S TUBE WALL THICKS REV'D (A8-5) SHEET 3 & 4 ADDED TO CLARIFY DRAWING. RADIUS CHANGED FROM R4.00 TO R3.75 (B4-2, B2-2). HOLE SIZE CHANGED FROM Ø0.181 TO Ø0.257 (C8-3, C3-5)	JPH	10.01.13
C	FINISH REMOVED (TO BE APPLIED AT NEXT ASSY)	ASB	14.11.13

DESIGN	CP	DESCRIPTION	DART AEROSPACE LTD
DRAWN	ASB	HAWKERSHIFT, ONTARIO, CANADA	
CHECKED	ASB	DRAWING NO.	D3017
MFG. APPR.		TITLE	BACK FRAME ASSEMBLY
APPROVED		SCALE	MTS
DATE	14.11.13		

RELEASED
2015 FEB 04
ECON 15-382L CP



RELEASED
2015 FEB 04

DESIGN	CP	DART AEROSPACE LTD HAINESBURY, ONTARIO, CANADA DRAWING NO. D8017 REV. C OF 4 SHEET 2 OF 4
DRAWN	AJS	
CHECKED	JS	
MFG. APPR.		
APPROVED		
DE APPR.		
DATE	14.11.13	TITLE BACK FRAME ASSEMBLY SQUARE NTS
COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD. ALL RIGHTS ARE RESERVED. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.		



NOTES:

- 1) MATERIAL: AISI 4130N TUBE, Ø.75 DIA x 0.083 WALL (M4130N-10750M083)
- 2) FINISH: NONE
- 3) TOLERANCES PER DART OSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE

NET WEIGHT: 0.88 lbs

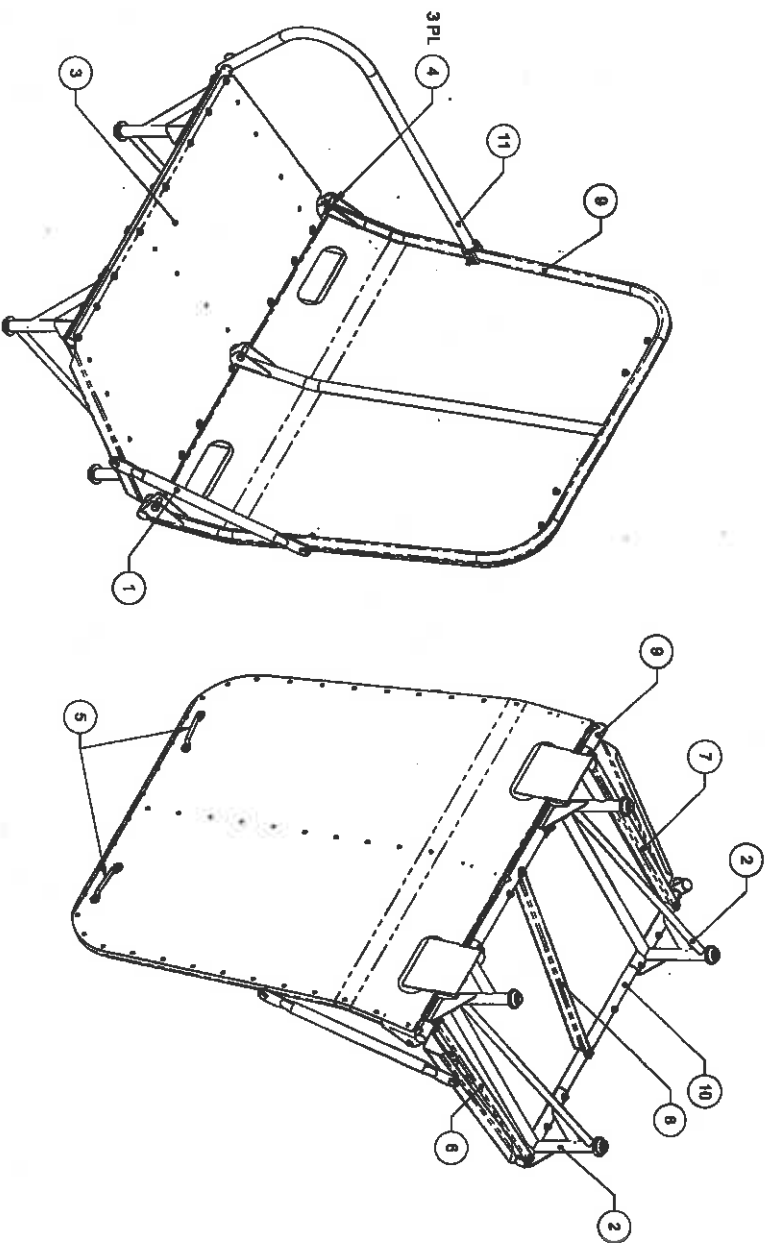


NOTES:
1) MATERIAL: AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: -2; 0.12 lbs.; -1; 0.01 lbs.

RELEASED
2015 FEB 04

DESIGN	CP	DART AEROSPACE LTD	
DRAWN	AS	HAMMERSLEY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C OF A
MFG. APPR.	<i>AS</i>	D3017	SHEET 4 OF 4
APPROVED	<i>AS</i>	TITLE	SCALE
DE APPR.		BACK FRAME ASSEMBLY	MTRS
DATE:	14.11.73	COPYRIGHT © 2001 BY DART AEROSPACE LTD. THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED FOR THE PURPOSES SPECIFIED ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.	

ITEM	QTY	P/N	DESCRIPTION
X	1	D5162-041	SEAT STRUCTURE ASSEMBLY
1	1	D2188-31	STRUT
2	2	D3016-041	SEAT FRAME ASSEMBLY
3	1	D3022-1	SEAT PAN
4	3	D3024-1	SPACER
5	2	D3031-1	LOOP
6	1	D5159-041	SEAT BACK BRACE ASSY
7	1	D5159-043	SEAT BACK BRACE ASSY
8	1	D5159-045	SEAT RIB ASSY
9	1	D5162-031	SEATBACK ASSEMBLY
10	1	D5168-041	TUBE ASSEMBLY
11	1	D5168-043	ARMREST ASSEMBLY
12	3	AN3-12A	BOLT
13	1	AN4-4A	BOLT
14	1	AN4-4A	BOLT
15	2	AN4-14A	BOLT
16	1	AN670-4	WASHER
17	4	MS20600AD4W4	RIVET, BLIND
18	8	MS20600AD4W5	RIVET, BLIND
19	17	MS21042L3	NUT, SELF-LOCKING
20	8	MS21042L4	NUT, SELF-LOCKING
21	4	MS24683-548	SCREW, CSK 100°
22	1	MS27038-1-17	SCREW, PAN-HEAD
23	3	MS27038-1-18	SCREW, PAN-HEAD
24	4	MS27038-1-19	SCREW, PAN-HEAD
25	2	MS27038-1-20	SCREW, PAN-HEAD
26	2	MS27038-4-21	SCREW, PAN-HEAD
27	4	MS27038-4-20	SCREW, PAN-HEAD
28	17	MS1148D0432J	WASHER
29	30	MS1148D0332J	WASHER
30	2	MS43DD4-16FC	SPACER



D5162-041 SEAT STRUCTURE ASSEMBLY

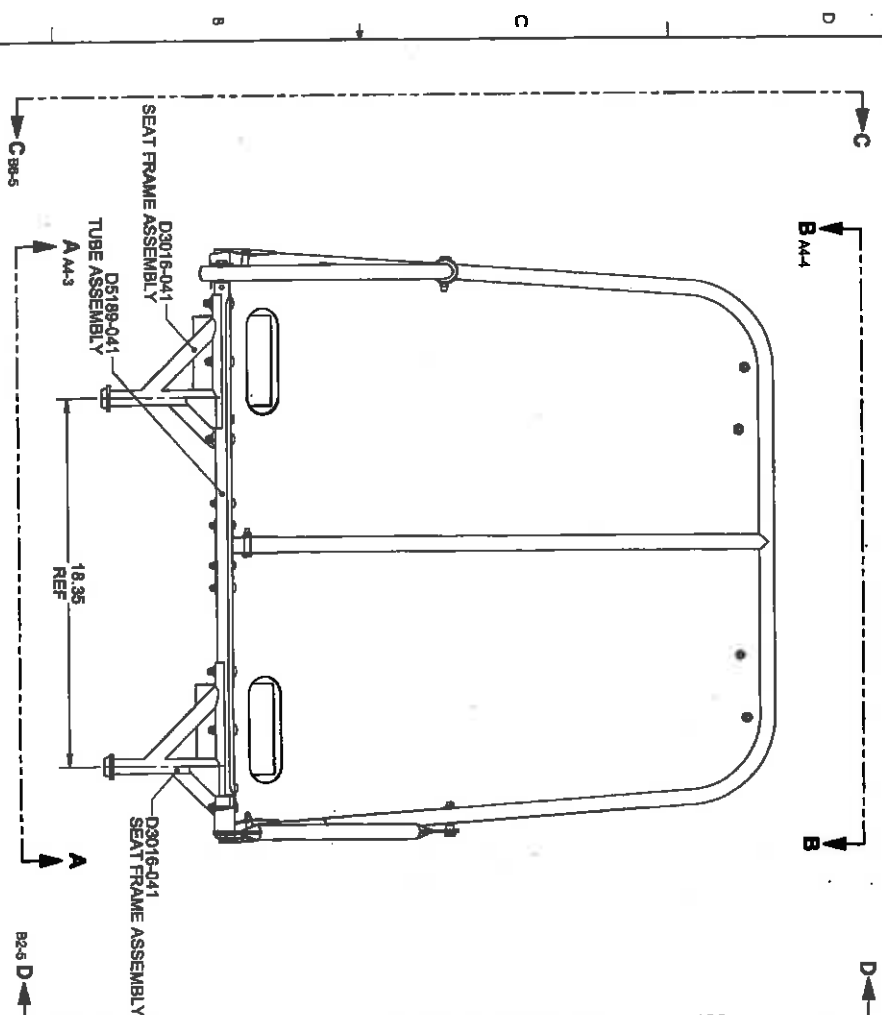
GENERAL NOTES:
 1) MATERIAL: N/A
 2) FINISH: NONE
 3) TOLERANCES: PER PART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: N/A
 6) IDENTIFICATION: N/A
 7) WEIGHT: 19.1 lbs

RELEASED
 2015 FEB 04
 T-100-5-324

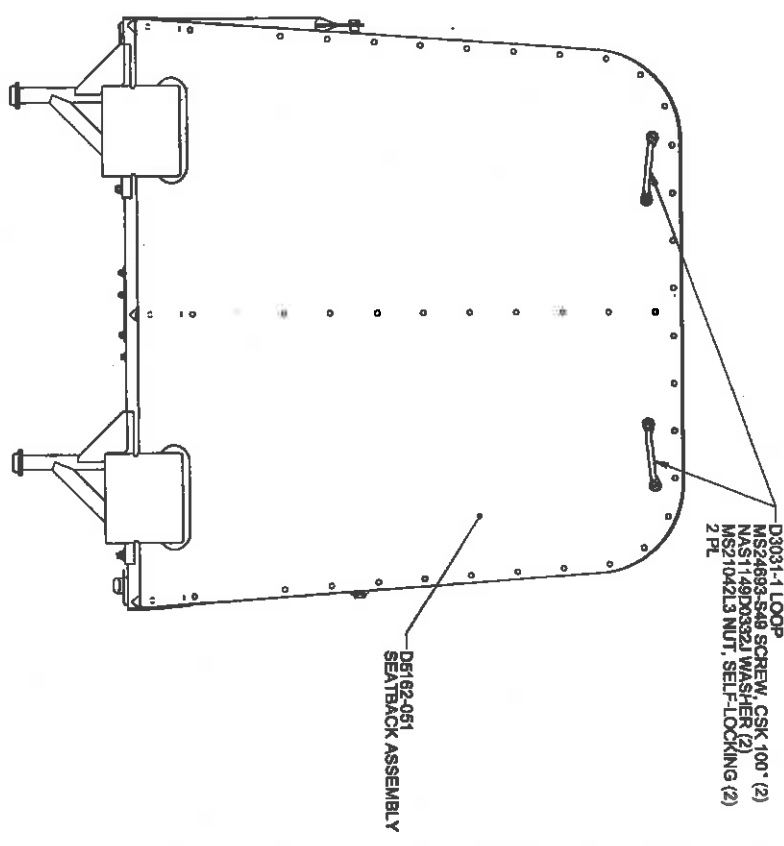
APPROVED

REV.	NEW ISSUE	DESCRIPTION	DATE
A	1	NEW ISSUE	14.10.03
DESIGN	AJS	DESIGN	
DRAWN	AJS	DRAWING NO.	
CHECKED	AP	D5162	
MFG. APPR.	DD	REVISION	
APPROVED	HS	SCALE	
DATE	14.10.03	TITLE	
		SEAT STRUCTURE ASSY	

CONFIRMED & SIGNED BY: AEROSPACE LTD.
 PART TO BE USED IN PRODUCTION: AEROSPACE LTD.
 PART TO BE USED IN PRODUCTION: AEROSPACE LTD.



D5162-041 SEAT STRUCTURE ASSEMBLY

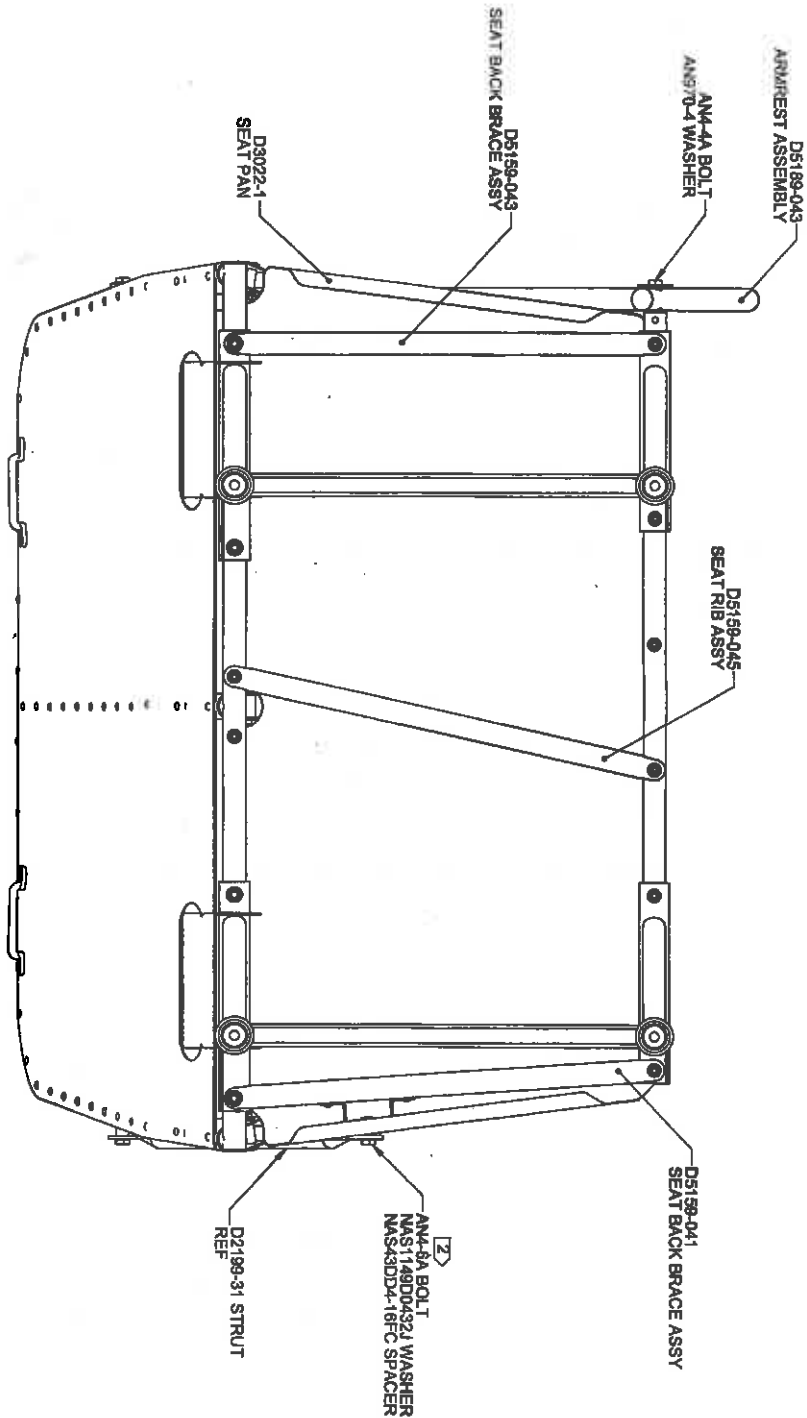


RELEASED
2015 FEB 04

APPROVED

DESIGN	AIS	DART AEROSPACE LTD
DRAWN	AP	HAWKSBURY, ONTARIO, CANADA
CHECKED	DD	REV. A
MFG. APPR.	HS	D5162
APPROVED	DE	TITLE
DATE	14.10.03	SEAT STRUCTURE ASSY
		NTS

COPYRIGHT © 2014 BY DART AEROSPACE LTD.
THIS DOCUMENT IS UNCLASSIFIED AND IS NOT TO BE RELEASED OUTSIDE THE DART AEROSPACE LTD. OR
ANY OF ITS SUBSIDIARIES OR AFFILIATES WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.



VIEW A-A
B8-2
(SCALE 1:5X)

SHEET 3 NOTES:
1) INSTALL D2189-31 STRUT AT SEAT PAN END FIRST
2) TRANSFER MARK FROM DS189-041 SEAT BACK BRACE ASSY TO D3022-1 SEAT PAN AND DRILL Ø0.386 THRU D3022-1 SEAT PAN.

RELEASED
2015 FEB 04

APPROVED

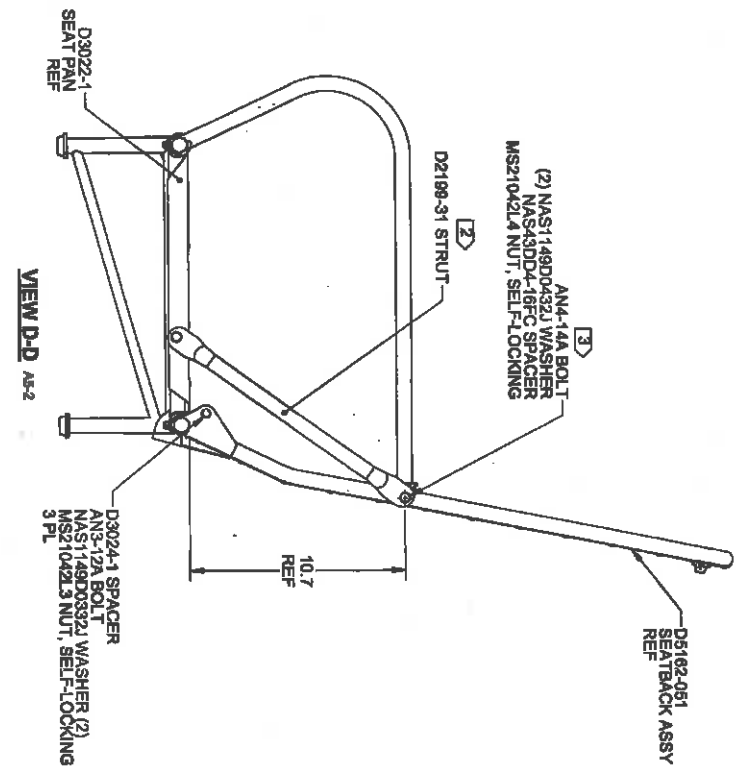
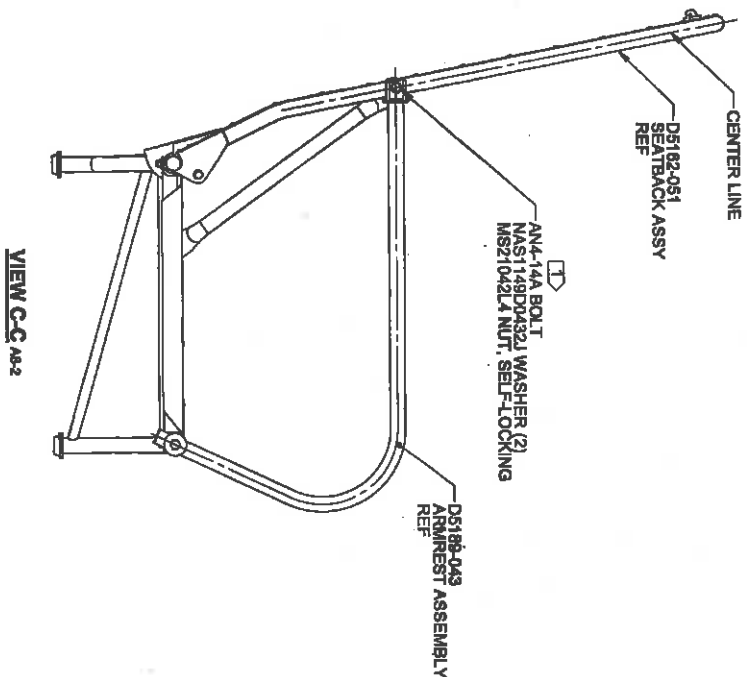
DESIGN	AS	AS	DART AEROSPACE LTD
DRAWN	AS	AS	HAYESBURY, ONTARIO, CANADA
CHECKED	AP	AP	DRAWING NO.
MFG. APPR.	DD	DD	D5162
APPROVED	HS	HS	TITLE
DATE	14.10.03	14.10.03	SEAT STRUCTURE ASSY
			SCALE
			NTS

THESE DOCUMENTS ARE THE PROPERTY OF DART AEROSPACE LTD. AND ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.



RELEASED
2015 FEB 04

DATE		14.10.03	
DESIGN	AJS		
DRAWN	AJB		
CHECKED	AP		
ING. APPR	DD		
APPROVED	HS		
DE APPR.	DS		
TITLE		REV. A	
SEAT STRUCTURE ASSY		D5162	
SHEET 4 OF 6		SCALE	
NTS			
CONTRACT NO. 034 BY BNAT AEROSPACE LTD. WORK ORDER NO. 034111 AND 034112, ISSUED BY BNAT AEROSPACE LTD. THIS DOCUMENT IS THE PROPERTY OF BNAT AEROSPACE LTD. IT IS TO BE USED FOR THE PURPOSES SPECIFIED THEREIN. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM BNAT AEROSPACE LTD.			



SHEET 2 NOTES:
 1) ALIGN THE PILOT HOLE ON THE D5162-043 ARMREST ASSEMBLY TO THE CENTERLINE ON THE D5162-051 BACK FRAME ASSEMBLY AND DRILL Ø0.257 THRU THE D5162-043 AND D5162-051.
 2) INSTALL D2198-31 STRUT AT SEAT PAN END FIRST
 3) TRANSFER MARK FROM D2198-31 STRUT TO D5162-051 SEATBACK ASSY AND DRILL Ø0.256 THRU D5162-051 SEATBACK ASSY

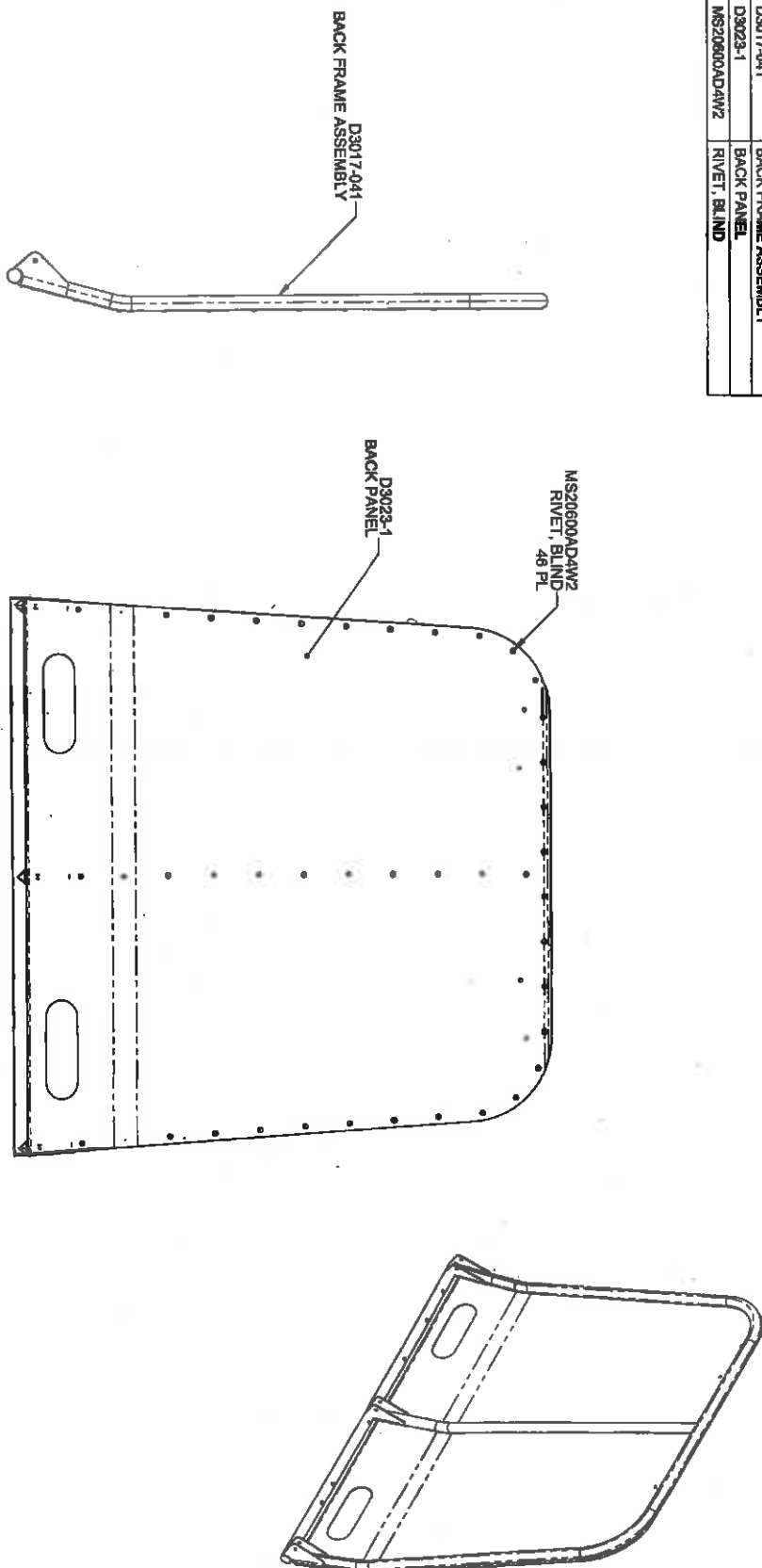
RELEASED
 2015 FEB 01

APPROVED

DESIGN	AJS	DART AEROSPACE LTD
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA
CHECKED	AP	DRAWING NO.
MFG. APPR.	DD	D5162
APPROVED	HS	TITLE
DATE	14.10.03	SEAT STRUCTURE ASSY
		SCALE
		NTS

Copyright © 2004 by DART Aerospace Ltd.
 All Rights Reserved. No part of this drawing may be reproduced without written permission from DART Aerospace Ltd.

ITEM	QTY	PIN	DESCRIPTION
X	D5162-051		SEATBACK ASSEMBLY
1	D3017-041		BACK FRAME ASSEMBLY
2	D3023-1		BACK PANEL
3	MS20600AD4W2		RIVET, BLIND



D5162-051 SEATBACK ASSEMBLY

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.8) PER DART OSI 005 4.3
 - 3) TOLERANCES: PER DART OSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 7.42 lbs
 - 8) TRANSFER MARK FROM D3023-1 TO D3017-041
DRILL Ø0.125 INTO THE D3017-041 (DRILL THRU ONE WALL ONLY).
THEN INSTALL MS20600AD4W2 RIVETS.

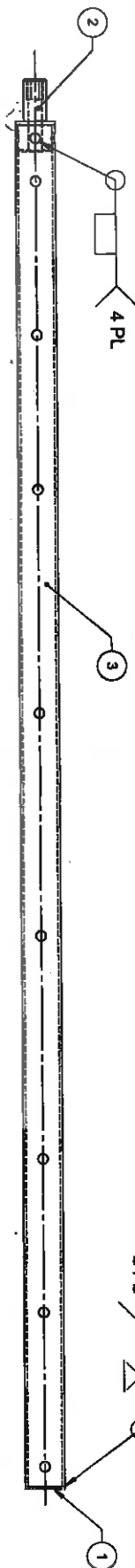
RELEASED
2015 FEB 01

APPROVED

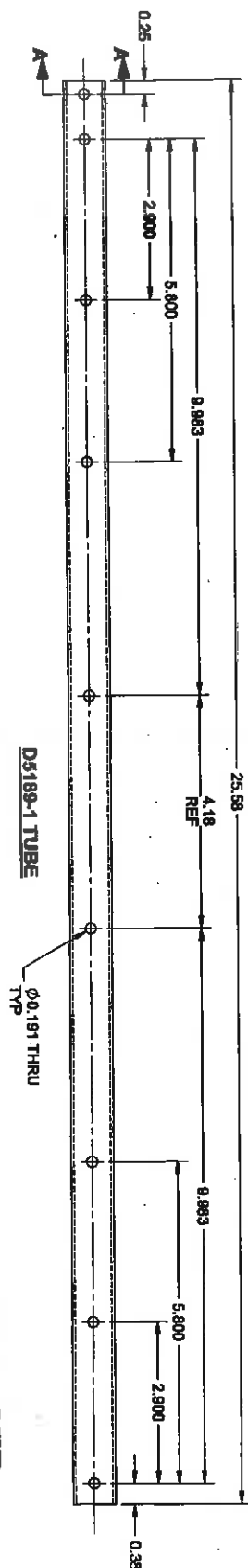
DESIGN	AJS	DART AEROSPACE LTD
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA
CHECKED	AP	REV. A
MFG. APPR.	DD	D5162
APPROVED	HS	SEAT STRUCTURE ASSY
DE APPR.	DS	SCALE
DATE	14.10.03	NTS

THIS DOCUMENT IS UNCLASSIFIED AND IS NOT TO BE RELEASED TO THE PUBLIC WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.

ITEM	QTY	P/N	DESCRIPTION
1	X	D5189-041	TUBE ASSEMBLY
2	1	D3017-41	END CAP
3	1	D4687-041	ARMREST STUD ASSY
3	1	D5189-1	TUBE

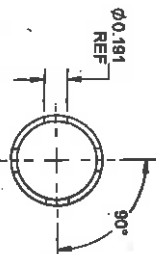


D5189-041 TUBE ASSEMBLY



RELEASED
2015 FEB 04
ECN 15-3722

SECTION AA
SCALE 2X



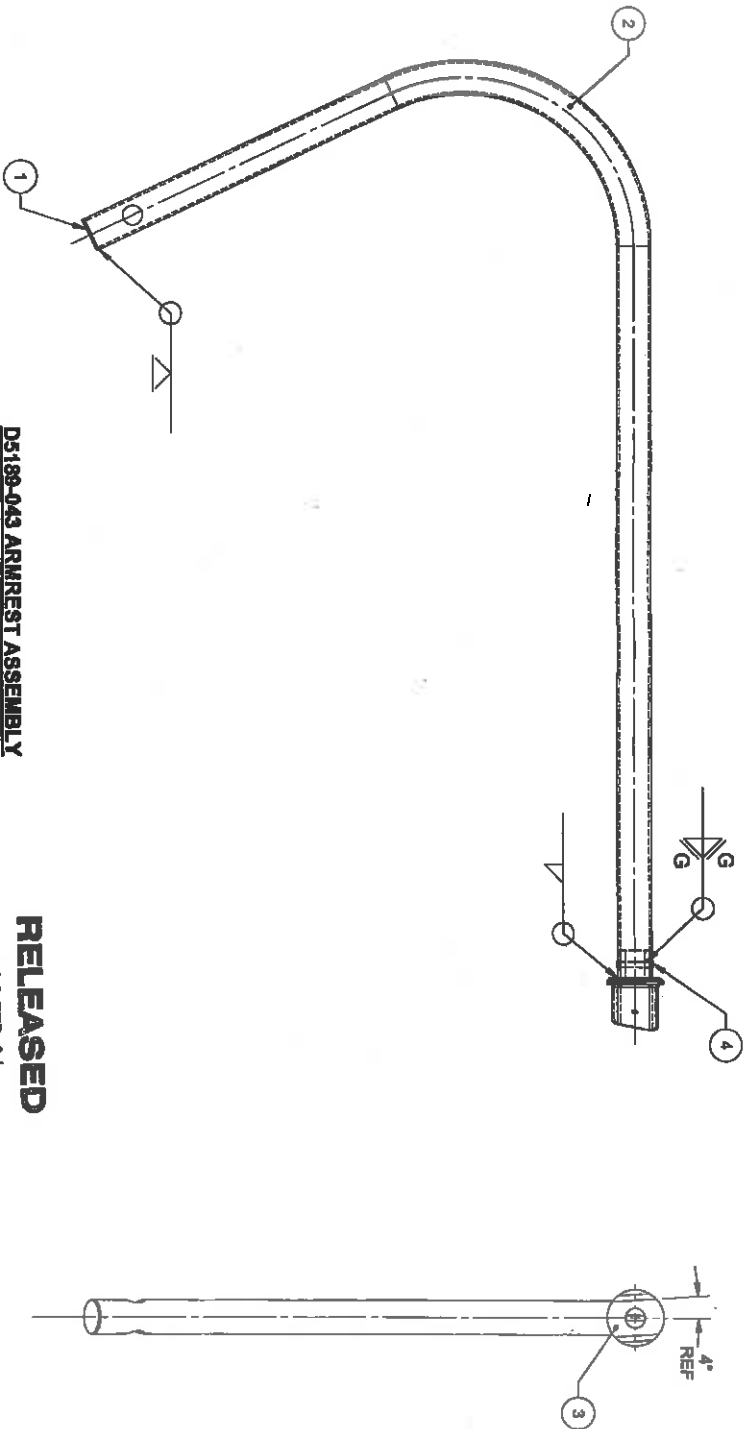
- NOTES:
- 1) MATERIAL -041: N/A
 - 2) FINISH -041: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART OSI 006 4.3
 - 3) TOLERANCES: PER DART OSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.006 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.85 LBS
 - 8) WELD PER DART OSI 004

APPROVED

REV.	NEW ISSUE	DESCRIPTION	DATE
DESIGN	AJS	DART AEROSPACE LTD	14.11.18
DRAWN	AP	HANESBURY, ONTARIO, CANADA	
CHECKED	AP		
MFG. APPR.	DD		
APPROVED	HS		
DATE	14.11.18	ARMREST COMPONENTS	

COPYRIGHT © 2018 BY DART AEROSPACE LTD
ALL RIGHTS RESERVED. THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD.
NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.

ITEM	QTY	PIN	DESCRIPTION
X	D5189-043	ARMREST ASSEMBLY	
1	1	D3017-11	END CAP
2	1	D5189-3	ARMREST
3	1	D5189-1	ARMREST FITTING
4	1	D5189-3	WELD PIN



D5189-043 ARMREST ASSEMBLY

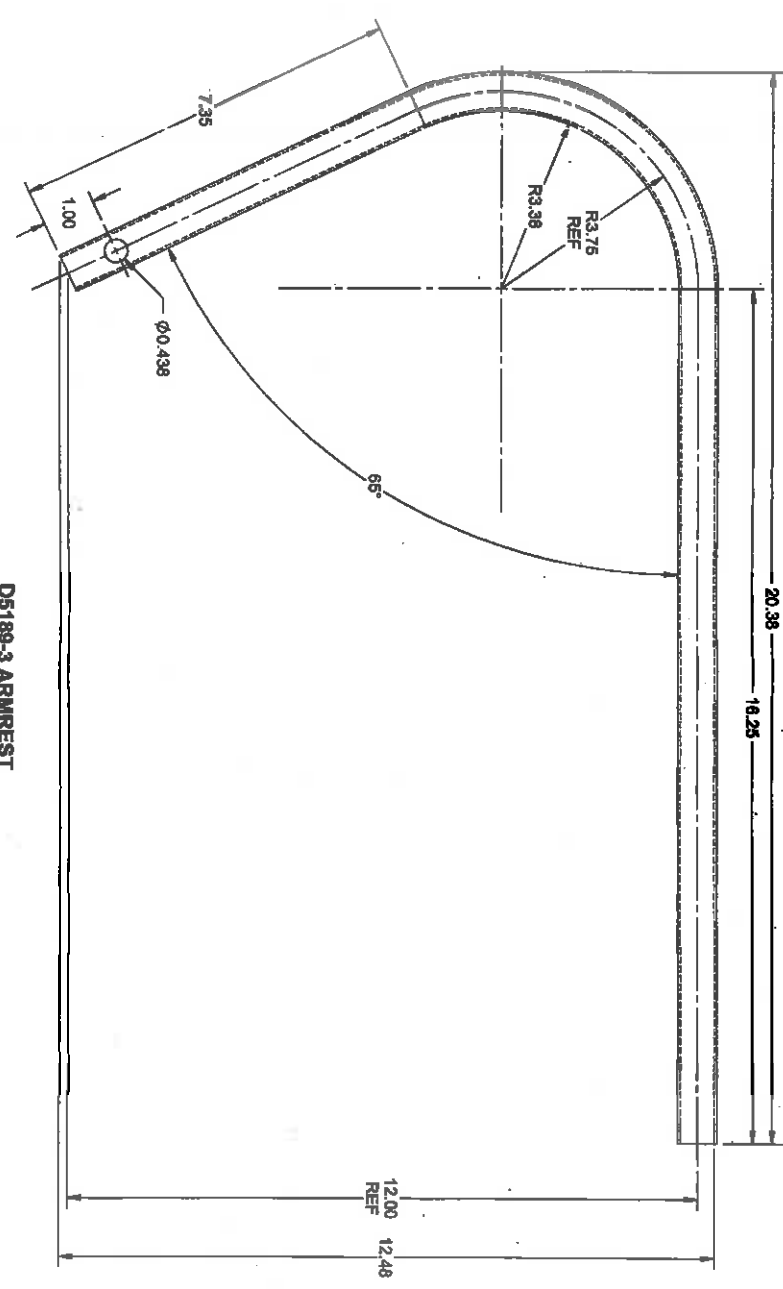
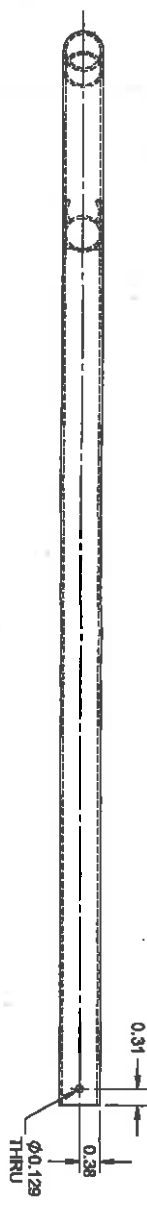
RELEASED
2015 FEB 04

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: POWDER COAT GREY SANDTEX (4.3 & 5.6) PER DART OSI 005 4.3
 - 3) TOLERANCES: PER DART OSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.006 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 1.08 lbs
 - 8) WELD PER DART OSI 004

APPROVED

DESIGN	AUS	AUS	DART AEROSPACE LTD
DRAWN	AUS	AUS	HAWTHORNE, ONTARIO, CANADA
CHECKED	AP	AP	REV. A
MFG. APPR.	DD	DD	D6189
APPROVED	HS	HS	ARMREST COMPONENTS
DATE	14.11.18	DATE	14.11.18

THIS DOCUMENT IS UNCLASSIFIED AND IS NOT TO BE RELEASED TO THE PUBLIC WITHOUT THE WRITTEN AUTHORIZATION OF DART AEROSPACE LTD.



- NOTES:
- 1) MATERIAL: AISI 4130N SEAMLESS STEEL TUBING, $\phi 0.750 \times 0.049$ WALL PER MIL-T-8738 OR AMS 6371/6330/6361/6362/6373/6374 REF M4130NTD.750W0.049
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART OSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.95 lbs

D5189-3 ARMREST

APPROVED

DESIGN	AIS	DART AEROSPACE LTD
DRAWN	AP	HAWKESBURY, ONTARIO, CANADA
CHECKED	DD	D5189
MFG. APPR.	HS	ARMREST COMPONENTS
APPROVED	DS	
DE APPR.		
DATE	14.11.18	

RELEASED
2016 FEB 04

